

# SUPPORTING A STATE ASSISTANCE PROGRAM USING THE GEORGIA FARM\*A\*SYST PROGRAM

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*REFERENCE:* *Proceedings of the 2001 Georgia Water Resources Conference*, held March 26-27, 2001, at the University of Georgia. Kathryn J. Hatcher, editor, Institute of Ecology, the University of Georgia, Athens, Georgia.

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**Abstract.** This paper addresses methods for the State of Georgia to increase the impact of federal and state dollars, in the event that a state cost share program is enacted. The Georgia Farm Assessment System (Farm\*A\*Syst) self-assessments are a powerful tool when used in combination with a states' available assistance programs and educational resources. The value of cost share programs can be improved using the Georgia Farm\*A\*Syst self-assessments by increasing the environmental impacts per dollar invested through conservation practices. Georgia Farm\*A\*Syst serves as a method to identify and prioritize the risks for causing environmental, health, economic, and/or regulatory problems. By targeting the corrective action to this risk area, Farm\*A\*Syst guarantees that federal and state funding are effectively supporting the agricultural sector's ability to protect the environment and improve water quality.

## INTRODUCTION

Georgia's agriculture is a significant contributor to the state's economy, with \$6.2 billion sales in 1998 (Georgia Agricultural Statistics, 2000). Federal and state cost share programs provide an opportunity for producers to be productive, while remaining in environmental compliance, thus providing an opportunity to significantly contribute to the states' economy. To assist their producers, improve their economy, and protect the environment, Kentucky and North Carolina have established state cost share programs. In North Carolina, participating farmers receive 75% of predetermined average costs of installed best management practices [conservation practices] with the remaining 25% paid by farmers directly or through in-kind contributions (Williams, 2001). The funds support cost share practices such as filter strips, riparian zones, nutrient management plans, livestock exclusion, and technical assistance positions.

Farms are increasingly being recognized as potential sources of surface and groundwater contamination in rural areas. Federal and state cost share programs serve to address and control nonpoint source pollution. These programs "promote practices that prevent or minimize pollution of all parts of the hydrologic cycle and avoid encouraging those that simply shift pollution from one medium to another" (Council for Agricultural Science and Technology, 1992). "Many of these state and federal programs offer a win-win solution to pollution problems, that is farmers receive assistance to adopt efficient production technology and practices that in turn lead to improved environmental quality" (Shank, 2000). For the producers, another benefit is the reduction in the initial cost to establish practices that address agriculture's contribution to nonpoint source water pollution. However, citizens profit from improvements in soil quality, wildlife habitat enhancement, and water quality for those downstream.

To encourage the use of farm practices that protect water quality, the Georgia Farm\*A\*Syst program works with producers to increase awareness of potential agriculture pollution. The program provides technical assistance, training, workshops, demonstrations, on-site assessments, and self-assessments. Self-assessments are publications a farmer uses to identify potential sources of contamination and rank areas that require corrective actions. With assessment information, producers can target the source of pollution that has the greatest impact on the environment and human health.

When federal and state cost share programs are linked with the Georgia Farm\*A\*Syst program, it could provide a successful nonpoint source pollution control program. Georgia Farm\*A\*Syst self-assessments guarantee that funding is used to eliminate the potential source of pollution with the greatest impact, using federal and state cost share dollars effectively to improve soil and water quality. Already, the Georgia Farm\*A\*Syst program is a component of many agricultural grants

pursuing the implementation of conservation practices that improve water quality throughout the state.

### GEORGIA FARM\*A\*SYST PROGRAM

In 1996, a program called Georgia Farm\*A\*Syst was developed with EPA Section 319(h) grants administered by the Georgia Soil and Water Conservation Commission and support from the DNR-Water Protection Branch and Pollution Prevention Assistance Division. The program was funded to encourage a voluntary means for producers to become environmentally pro-active in managing their farms and ultimately protecting their water resources and preventing pollution. Since its inception, the program has gained support and cooperation of Georgia's farmers. Success is attributed to a series of publications, referred to as self-assessments, that focus on identifying potential sources of contamination, supplying information on corrective actions, and ultimately encouraging the farmer to form an action plan to address concerns.

As part of the program, 20 publications have been published focusing on specific environmental and farm practice areas. Publications are available in the areas of water quality, farm storage and handling practices, animal production, and land management.

In the past three years, the Georgia Farm\*A\*Syst program has been a "cornerstone" of grant proposals. The publications, along with the technical support provided by the program, have been used to improve water quality in various watersheds by addressing agricultural pollution and providing methods for corrective actions.

### INNOVATIVE DELIVERY METHODS

The Georgia Farm\*A\*Syst program and self-assessment publications have been delivered to a wide audience in a variety of innovative ways. These methods include pilot projects, specific training of various organizations, and educational partnerships. In addition, these methods indicate the importance of the Georgia Farm\*A\*Syst program to Georgia in the event a state cost share program was enacted. For example, EPA Section 319(h) grant recipients use the Farm\*A\*Syst self-assessments to determine and evaluate the need for technical and financial support of their specific audience.

Some of the ways Farm\*A\*Syst has been used to support Georgia's rural residents and farmers include:

- Georgia Farm\*A\*Syst pilot project conducted by Extension professionals in the Gum Creek Hydrologic Unit (Crisp and Dooly counties) and the Little River-Rooty Creek Hydrologic Unit (Morgan and Putnam counties). On-site assessments and the distribution of new self-assessments were provided to the farmers.
- Through one training workshop, every Georgia Department of Agriculture milk inspector was trained in using the *Dairy Production* assessment and they hand delivered the assessment to every producer selling milk in Georgia. More than 50 producers have requested additional information.
- Georgia Farm\*A\*Syst and the Cooperative Extension Service have developed a series of videotapes using the Georgia Farm\*A\*Syst *Pesticide Storage and Handling* assessment. Individuals needing re-certification credit (CEU) can visit local extension agents and view the tapes to receive credit towards their license. These tapes are frequently used as a tool to train and self-evaluate the pesticide practices of certified applicators.
- As part of the Watershed Stewardship Seminar, a two day event conducted by the Agricultural Pollution Prevention Program and a variety of state and federal agencies, the Georgia Farm\*A\*Syst self-assessments, along with site visits, helped to encourage individuals to identify areas on their farms where actions could be taken to protect the streams within the watershed.
- The University of Georgia, during 1999 and 2000, trained nearly every poultry grower throughout the state of Georgia. During the training, each grower completed a *Broiler Production* assessment as part of developing his or her nutrient management plan. As a result of the effort, over 5,000 growers were reached.
- The Georgia Farm\*A\*Syst staff worked with the poultry integrators to train field service professionals to take well samples and test the water. After the results were collected, any samples that had a level above 5ppm nitrate received assistance from the Farm\*A\*Syst staff to help identify the problem. The staff went out to the facilities and conducted the *Improving Drinking Water Well Condition* assessment for 30 different sites and in most cases identified corrective actions that were immediately implemented.

### ACCOMPLISHMENTS

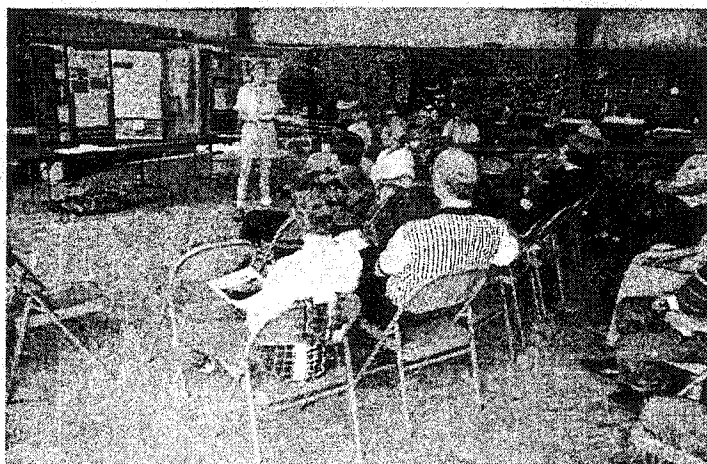
Since 1996, approximately 21,000 of these self-assessments have been distributed to farmers and rural residents through requests from individuals, Cooperative

Extension Service agents (CES), and/or USDA-Natural Resources Conservation Service (NRCS) representatives. In addition, many of the publications have been distributed to Georgia's farmers as part of educational field days or training activities, booths at agricultural events or conferences, and through farming organization and association meetings. Some of the self-assessments have been distributed through larger community efforts to improve the overall water quality of an area.

The self-assessments are farmer friendly and completed at the farmer's convenience, with little need of professional assistance. However, a total of 78 on-site assessments have been conducted by the Georgia Farm\*A\*Syst staff with farmers. The number above only represents a small portion of on-site assessments completed by the farmers. These numbers do not include the many on-site assessments conducted by NRCS professionals and local CES agents.

Additionally, the Georgia Farm\*A\*Syst Program has accomplished the following since 1996:

- A total of 8 guidance and training workshops, that focused on using Farm\*A\*Syst publications, conducted for a variety of agencies, including NRCS, CES, and other agricultural professionals.
- A total of 9 workshops and/or field days conducted for farmers and rural residents using the Georgia Farm\*A\*Syst Program.



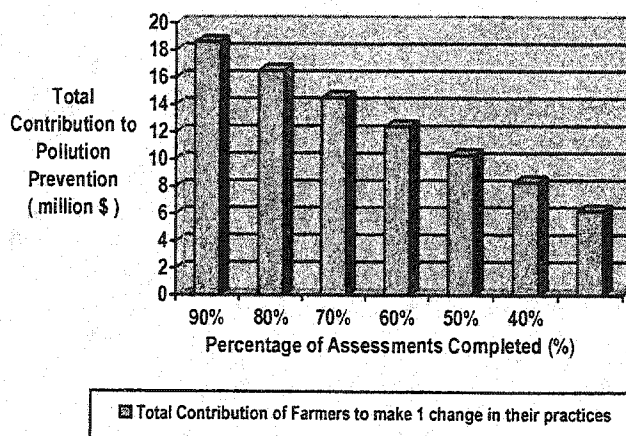
**Georgia Farm\*A\*Syst presentation at the Red Bud Farm Field Days**

- Approximately 90 conferences, meetings, and events attended to display, distribute Farm\*A\*Syst self-assessment publications and/or give a presentation.

## ENVIRONMENTAL & ECONOMIC IMPACTS

In a 1999 survey, 82% of the farmers who completed a Georgia Farm\*A\*Syst assessment indicated that they would make a change in the management of their farm to reduce the risk of an environmental problem. On average, the cost associated with one change was approximately \$1,200. In the same survey, 40% of the farmers stated that they would make two or more changes in the management of their farm to reduce the risk of environmental problems, as a result of the Farm\*A\*Syst self-assessments. When considering the contribution of farmers to pollution prevention efforts, if 80% of the self-assessments distributed were completed and 82% of the farmers make one change in their farming practices/management activities approximately 16 million dollars would have been provided by farmers towards pollution prevention (*Figure 1*). Even if only 40% of the 21,000 self-assessments distributed were completed, 8 million dollars would have gone to pollution prevention efforts.

In National Farm\*A\*Syst surveys, approximately 50% of farmers and landowners who receive the publications conduct self-assessments for their farms and homes. (<http://www.wisc.edu/farmasyst/impact/nation.html>) The cost-benefit of this project states that for every \$1 of grant funding which was provided under an EPA Section 319(h), farmers have contributed \$22 towards pollution prevention efforts.



**Figure 1. Farmer contributions to pollution prevention efforts as a result of the Georgia Farm\*A\*Syst assessments.**

## FUTURE PLANNING ACTIVITIES

The Georgia Farm\*A\*Syst program has proven its effectiveness in eliminating sources of agricultural pollution through the use of voluntary and confidential self-assessments. To continue the current efforts, encourage more widespread adaptation and use of Farm\*A\*Syst, and link to federal cost share programs, the support for Georgia Farm\*A\*Syst program must be maintained.

The Georgia Farm\*A\*Syst self-assessments have potential uses in the 4-H student projects and community service efforts. The Farm\*A\*Syst program should target the 4-Hers and provide assistance in assessing the needs of their own farms and those in the community. Other future activities include:

- The Farm\*A\*Syst program is involved in three EPA Section 319(h) grants, Edie Creek in Lamar County, Richland-Beaver Dam Creek in Greene County, and the Watershed Protection Strategy in the Lower Oconee Watershed. It provides educational training using the self-assessments and copies of the publications needed to perform the outcomes stated in the grant. In addition, the DNR-Environmental Protection Division is reviewing three other grants which contain an educational component using the Georgia Farm\*A\*Syst Program.
- The Georgia Farm\*A\*Syst staff will provide support to any individuals seeking financial assistance for implementation of agricultural BMPs through new programs or existing programs such as EPA Section 319(h) funds. It is the desire of the Farm\*A\*Syst staff to use the self-assessments as a component of any grant pursuing the implementation of BMPs on farms. This assessment process will target the corrective action needed in the highest risk areas.
- Interactive CD self-assessments are needed to provide training and re-certification credit for those individuals with a Certified Pesticide Applicator's License or certified animal feeding operators. The interactive CD will allow the assessment to be completed by farmers or green industry professionals, who have a computer, access to the web or ability to visit to their local Cooperative Extension Service office.

## SUMMARY

Georgia Farm\*A\*Syst has developed into an essential tool used to improve water quality throughout the state. Dairy and broiler producers, who have used the

Georgia Farm\*A\*Syst self-assessments as part of an outreach effort, have efficiently used federal cost share funding to improve their operations and protect the environment. EPA Section 319(h) programs to Edie Creek in Lamar County and Richland-Beaver Dam Creek in Greene County, use every dollar "wisely" by following the guidance of technical professionals and the rank results of the Georgia Farm\*A\*Syst self-assessments. Georgia Farm\*A\*Syst is the "cornerstone" of a successful nonpoint source pollution control program that targets agricultural producers. If Georgia implements a state cost share program, the Georgia Farm\*A\*Syst program would be a vital to increase the impact of the states' dollars towards improving environmental quality.

Long-term support of the Georgia Farm\*A\*Syst program for outreach activities, educational programs, and on farm technical assistance is critical. The program is listed as a major component of the State's nonpoint source pollution control plan and usage is therefore encouraged in all grants. These grants rely on a maintained and supported Farm\*A\*Syst program to complete their goals; however, without proper funding this will not be possible.

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